

IN THE CLAIMS

Please cancel claim 10 without prejudice. Please amend claims 3, 4 and 9 (marked up version attached in Appendix), such that pending claims 1-9 are as follows:

1. An accelerator comprising a plurality of accelerating cells arranged to convey a beam, adjacent cells being linked by a coupling cell, the coupling cells being arranged to dictate the ratio of electric field in the respective adjacent accelerating cells, at least one coupling cell being variable to allow a range of ratios including positive values and negative values.

2. An accelerator according to claim 1 in which the at least one coupling cell is variable smoothly from a positive value to a negative value.

3. (Amended) An accelerator according to claim 1, in which the beam is relativistic over substantially the length of the accelerator.

4. (Amended) An accelerator according to claim 1, in which the variable coupling cell comprises a cavity containing a conductive element rotatable about an axis transverse to the beam axis.

5. The use of an accelerator in which a plurality of accelerating cells are arranged to convey a beam, and adjacent cells are linked by a coupling cell, the coupling cells being arranged to dictate the ratio of electric field in the respective adjacent accelerating cells, at least one coupling cell being variable to allow a range of ratios including positive values and negative values.

6. Use according to claim 5 in which the at least one coupling cell is variable smoothly from a positive value to a negative value.

7. An operating method for an accelerator in which a plurality of accelerating cells are arranged to convey a beam, and adjacent cells are linked by a coupling cell, the coupling cells being